

METHOD OF FABRICATING POLYSILICON FILM BY EXCIMER LASER CRYSTALLIZATION PROCESS

Abstract

A method of fabricating a polysilicon film by an excimer laser crystallization process is disclosed. First, a substrate with a first region, a second region surrounding the first region, and a third region is provided. An amorphous silicon film is formed on the substrate. A photo-etching process is performed to remove parts of amorphous silicon film in the third region to form an alignment mark. Then, a mask layer is formed on the amorphous silicon film and a second photo-etching process is performed to remove the mask layer in the first region to expose the amorphous silicon film in the first region. After that, an excimer laser irradiation process is performed so that the amorphous silicon film in the first region is crystallized and becomes a polysilicon film.